

REMARKS

Counsel thanks Examiner C. Goodman for the courtesy of an after-final interview held on August 9, 2001.

At the Interview, numerous proposed claim amendments, which might define over the applied art, were discussed. The Examiner, however, indicated that filing of a CPA application is required for the claim amendments to be considered. A request for a CPA application (filed concurrently) and this Preliminary Amendment follow accordingly.

Claims 15-32 are pending in the present application. Claims 9-13 have been withdrawn from further consideration by the Examiner. Claims 1-8 and 14 have been deleted. New claims 15-32 have been added to provide Applicants with the scope of protection to which they are believed entitled. No new matter has been introduced through the new claims.

The objection to the specification is noted. Applicant respectfully requests that the correction be held in abeyance pending allowance of the claims. The objection to the drawings as well as the claim objection and indefiniteness rejection indicated in the Final Office Action of March 13, 2001 are moot in view of the foregoing amendments, as will be apparent to the Examiner upon his review of same.

Claims 1-8 and 18 have been cancelled and replaced with claims 15-32 which are carefully drafted to effectively define over the 35 U.S.C. 102(b) art of Hoffa and the 35 U.S.C. 103(a) art of Zimmerman, Chamber, Baranski, and Conrad, as indicated in the March 13, 2001 Final Office Action. These claim amendments are made solely for the purpose of accelerating prosecution, and are not necessitated by the above mentioned art rejections.

New independent claim 15 is directed to a processing apparatus comprising input and output conveyors installed in series and spaced apart from each other for carrying material to be processed in a working direction, and a processing unit disposed between the input and output conveyors for processing the material. Each of the input and output conveyors includes an endless belt having a non-skid surface adapted to carry the material and an opposing surface provided thereon with a **guiding strip extending longitudinally of the endless belt**. The endless belt is trained around a pair of input-side and output-side pulleys, which have **horizontal axes of rotation**, with the non-

skid surface facing outwardly and the guiding strip extending in a plane substantially parallel with the working direction. Each of the pulleys has a groove extending continuously circumferentially around the pulley in the plane for engaging the strip, thereby preventing transverse displacements of the endless belt with respect to the working direction. See new claim 15.

New claim 15 is not anticipated by Hoffa since the reference fails to teach or disclose each and every limitation of claim 15. More particularly, Hoffa does not appear to teach or disclose a guiding strip extending **longitudinally** of the endless belt, as recited in new claim 15. Belt 12' shown in Fig. 5 of Hoffa appears to have a plurality of teeth extending **transversely** of the belt.

New independent claim 15 is not obvious over Zimmerman, Chamber, Baranski and Conrad as applied in the Final Office Action since there is no suggestion or motivation to combine the references in the manner proposed by the Examiner.

The Examiner admitted that Zimmerman lacks the claimed (1) input and output continuous (or endless) belts and (2) guiding strip. The Examiner however stated that the above features can be imported in Zimmerman from Chamber and Baranski, respectively.

Zimmerman relates to a bottom roller feed machine in which wood is fed into and through a cutting zone 20 by a plurality of rollers 38, 36. See Fig. 1 of Zimmerman. To properly position the stock material (wood) on the rollers 36, 38, a stationary fence 34 is provided. Though there is no explicit description in Zimmerman, it appears that by placing the stock material against the fence 34, see col. 4 lines 46-47, proper tracking of the stock material in and through the cutting zone 20 is ensured. Thus, Zimmerman happens to **disclose a different way to maintain precise orientation** of the stock material in the wood working machine, that is, to use an **external fence** to avoid lateral movement of the stock material.

A similar principle is used in Baranski. Baranski also relates to a bottom roller feed machine in which wood is fed into and through a cutting zone 82, 84 by a plurality of rollers 44. See Fig. 3 of Baranski. To properly position wood on the rollers 44, a fence 42 is provided. Unlike the fence 34 of Zimmerman which is stationary, the fence 42 of Baranski is a rotary fence having components substantially as indicated in page 7, the last paragraph of the last Office Action. To further ensure proper tracking of the wood, pressure rollers 86 are provided opposing the fence 42.

Then wood will be placed between and grasped by the fence 42 and pressure rollers 86. The fence 42 has a continuous belt 80 which rotates to force wood in and through the cutting zone 82, 84. Thus, like Zimmerman, Baranski discloses a different way to maintain precise orientation of the wood in the wood working machine, that is, to use **external devices** (fence and rollers) to avoid lateral movement of the wood. Unlike the present invention, the Baranski rotary fence 42 is disposed vertically as shown in Fig. 3, and hence, does not have a **horizontal axis of rotation**, as recited in new claim 15.

It is worthwhile noting that, the present invention uses an endless belt having a non-skid working surface for carrying wood. Proper traction of the endless belt, and hence the wood carried thereon, is ensured by a guiding strip provided, in contrast to the applied art, **on** the endless belt itself.

The Examiner argues that it would have been obvious to replace the feeding rollers of Zimmerman with input and output continuous belts taught by Chamber, and then, modify the input and output continuous belts with the rotary fence taught by Baranski in order to facilitate positive guidance and accurate positioning of the continuous belts by preventing lateral movement of the continuous belts during the longitudinal movement thereof. See page 8, lines 1-4 of the last Office Action. Applicant respectfully disagrees.

First, the above language of the last Office Action is merely a statement that the reference(s) can be modified, which Applicant contends to the contrary, and does not state any **desirability** for making the modification. It is clear that the Examiner is relying upon impermissible hindsight to choose and pick from the references only the teachings which support the assertion that the claimed invention is obvious.

Second, the fence 42 of Baranski is apparently configured to facilitate the longitudinal movement of the wood and limit lateral movement thereof. There is no teaching in Baranski or other applied art or the knowledge generally available to people of ordinary skill in the art that the fence 42 can be used to carry wood instead of the rollers 44. The endless belt of the present invention is used to **carry** the material to be processed. See e.g. new claim 15.

Third, ridge 156 in belt 80 (Fig. 5 of Baranski) is not explicitly described by Baranski as being able to facilitate positive guidance and accurate positioning of the belts 80 by preventing lateral movement of the belts during the longitudinal movement thereof, as alleged by the Examiner. Baranski is silent as to functions of the ridge 156. Then, a reasonable reading of the Baranski reference should be that, since belt 80 is disposed vertically, ridge 156 is provided as a support for belt 80 against gravity rather than as a tracking guide. When belt 80 is disposed horizontally in the manner suggested by the Examiner, ridge 156 may become redundant. Thus, it would not have been obvious to modify the input and output continuous belts as taught by Chamber with the ridge 156 taught by Baranski since **it is not clear what the Zimmerman/Chamber input and output continuous belts would have benefited from such a modification.** There is no teaching in the applied references that the Chamber continuous belts may need ridge 156 as a support against gravity. Proper tracking of the wood through the apparatus is ensured by the Zimmerman stationary fence 34.

Fourth, even assuming that the references are combinable, they are not combinable in the manner proposed by the Examiner. Instead, a person of ordinary skill in the art would have been motivated, at best, to **replace the stationary fence 34 of Zimmerman with the rotary fence 42** or the combination of the fence 34 and rollers 86 taught by Baranski to provide a machine which is automatically adjustable and capable of processing wood of various sizes within a predetermined size range without interrupting the sawing process for changes in the size of the wood, and which has a rotatable fence for urging the wood through the machine. See col. 2 lines 26-35 of Baranski. Apparently, this hypothetical device does not have all limitations of the claimed invention, i.e. input and output conveyors each including an endless belt trained around pulleys having **horizontal axes of rotation**, as recited in claim 15.

For any of the above reasons, Applicant respectfully submits that Zimmerman, Baranski, and Chamber are not combinable in any manner that could render the invention of new claim 15 obvious. Accordingly, new independent claim 15 is patentable over the applied art of record.

Dependent claims 16-31 and independent claim 32 are patentable at least for the reason advanced with respect to new claim 15. Claims 16-32 are also patentable on their own merit since

these claims recite other features of the invention neither disclosed, taught nor suggested by the applied art.

For example, the applied references do not explicitly disclose, teach or suggest that the conveyors are driven by a single power unit to rotate at **substantially the same speed**. See new claim 16 and original claims 1 and 14. The Examiner did not specify if the limitation is implicitly disclosed or suggested by the applied art. Clarification is respectfully requested.

The applied art also fails to disclose, teach or suggest the V-shaped notches formed along the guiding strip, as recited in new claim 19. New claim 19 further requires that the notches extend from a top face of the strip toward **but not contacting with the opposing surface of the endless belt**. Conrad, as applied by the Examiner, teaches many embodiments all having notches touching the belt. See e.g. Figs. 2-5 of Conrad. The reference does not fairly disclose or teach that the grooves are in **constant contact** with the strip, as recited in claim 20, and the strip extends **continuously** throughout an entire length of the endless belt, as recited in claim 21.

Claims 31 and 32 recite a further limitation which defines over the applied art, as indicated by the Examiner at the Interview. More particularly, claims 31-32 require that the material to be processed be conveyed on the non-skid upper surface of the endless belt **without positive lateral edge contact with a fence** provided in the processing apparatus. This limitation is clearly supported by at least Fig. 3 of the present application. The applied art expressly requires that the wood be placed against a fence (34 of Zimmerman, or 42 of Baranski). The non-skid surface of the invention in combination with the groove/strip advantageously avoid the need for the fence and the prior art need for maintaining a positive pressure of applying the wood to the fence in the context of claims 31-32.

Each of the Examiner's objection/rejection(s) has been overcome/addressed. All claims are in condition for allowance and early indication of same is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

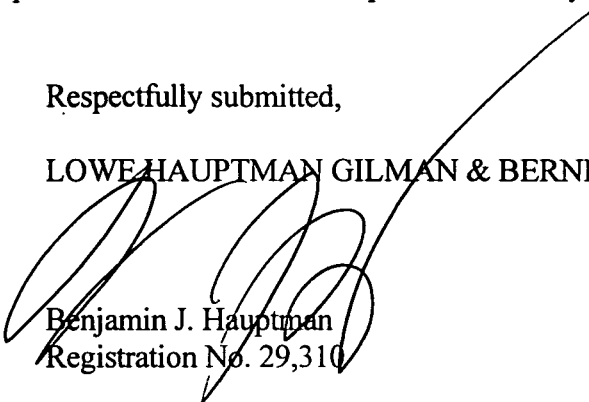
To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

Serial Number: 09/053,832

including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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